Aberrant distributional records of Cordilleran Buzzard (Hawk) *Buteo poecilochrous* in Colombia reflect confusion with White-tailed Buzzard (Hawk) *B. albicaudatus*

by J. Cabot, T. de Vries & F. G. Stiles Received 5 May 2005

Cordilleran or Puna Buzzard (Hawk) *Buteo poecilochrous* is restricted to the high Andes from southern Colombia to northern Argentina and Chile (Fjeldså & Krabbe 1990). According to Lehmann (1945), it occurs in southern Colombia at 500–2,000 m in the upper Cauca and upper Patía valleys, in the upper tropical and subtropical zones. Meyer de Schauensee (1964) and Hilty & Brown (1986) also reported the species from this area at the same altitudes, undoubtedly following Lehmann (1945). Thiollay (1994) commented on the 'somewhat confusing situation in Colombia, where [the] species [is] suspected to be migrant, because no breeding reported, but populations in Bolivia and Peru reported to be resident all year round, leaving source of any migrants to Colombia as a mystery'.

Both altitudinal range and distribution in Colombia are somewhat anomalous compared to elsewhere in its range, where it occurs above 3,000 m on peaks and cliffs of the cordillera crest and on hillsides and rocky areas in the *puna* and *páramo* (for Ecuador, see Solís & Black 1985 and Coello 1997; Peru, Koepcke 1964 and Walker 2002; Bolivia, Remsen & Traylor 1989 and Cabot 1991; Chile, Johnson 1965; and Argentina, Narosky & Yzurieta 1987), quite different to the dry inter-Andean valleys of the Cauca and Patía rivers in southern Colombia.

Erroneous records

Lehmann (1945) cited the species for Colombia on the basis of birds he collected and observed in Paloverde and Diego Pérez, municipality of El Bordo (02°07'N, 76°59'W), in the Patía Valley, on the Pacific slope of dpto. Cauca, and from a specimen taken at Pavas (05°16'N, 75°03'W), in the western Cordillera, by Swedish naturalist Kjell von Sneidern. He based his identification on their supposedly longer tails and larger size and robustness compared to White-tailed Buzzard (Hawk) *Buteo albicaudatus*, and because they preferred steep mountain slopes, despite breeding in trees. In fact, the geographical range and altitudes assigned to *Buteo poecilochous* in Colombia are erroneous as they are based on misidentified specimens, all of which are *B. albicaudatus*. However, we confirm that *B. poecilochrous* is present in southern Colombia, in areas similar to its known habitat elsewhere, above 3,000 m. The confusion regarding the identity of the specimens collected by Lehmann and von Sneidern becomes patent after examining the following birds: ICN 8724, Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá

(subadult male, Los Corrales, Patía, Cauca, 900 m, taken by Lehmann, 28 September 1943); NHMUC OK0098E, Museo Historia Natural, Universidad de Cauca, Popayán (juvenile male taken by Lehmann, but no other details); NMR 568608, Museum of Natural History, Stockholm (dark juvenile male, río Timbío, Cauca, 1,100 m, taken by von Sneidern, 20 January 1936); and MHNG 1125.065, Museum La Ville, Genève; dark subadult female, Tambo, Charguayaco, Valle del Cauca, 1,750 m, taken by von Sneidern, 2 November 1957). All are, in fact, B. albicaudatus, being dark blackish slate above with relatively long pointed wings. The primaries are rather long compared to the secondaries and noticeably longer than the tail; and other plumage characteristics and measurements also separate them (de Vries 1973, Cabot & de Vries 2005). Lehmann (1945) gave the following characteristics for these birds. Adults dark slate above (and also ventrally in dark morphs), with a metallic 'tint' (however, B. poecilochrous is pale to mid grey above, with northern birds paler than southern examples from Bolivia, Chile and Argentina). Adult females have reddish-brown lesser wing-coverts and scapulars (but, in fact, B. poecilochrous has an extensive uniform reddish-brown mantle, sometimes extending to the tertials, and subadult males of both species have reddish-brown backs). Pale-morph adults have the head-, neck- and throat-sides dark slate grey (actually, in B. poecilochrous these parts are pure white). In darkmorph subadults (treated by Lehmann as adults) the breast is barred grey-black and white with hazel tones (both sexes of B. poecilochrous have somewhat reddishbrown barring or a reddish-brown breast-band and reddish mantle at this age). Dark-morph juveniles and subadults are blackish with pale whitish areas (but, in truth, these plumages of *B. poecilochrous* are brown with cinnamon or buffish markings). Given the reddish-brown back and grey and white throat, head- and neck-sides, the plate in Lehmann (1945), purportedly of a pale-morph female B. poecilochrous, in fact is a *B. albicaudatus* adult in definitve plumage.

Buteo albicaudatus and B. poecilochrous (and Variable Buzzard [Hawk] B. polyosoma) exhibit two colour morphs and a process of delayed maturation with several different age-related plumage types that are similar between species (with some specific differences) at equivalent ages (Cabot & de Vries 2005). Even without taking into account subtle individual and geographical variation, their separation is undoubtedly difficult, especially juveniles and subadults of dark-morph B. albicaudatus and B. poecilochrous (Cabot & de Vries 2005), which similarities were also mentioned by Gurney (1879) and have led to B. poecilochrous being attributed spatial requirements in Colombia very different from those it actually occupies throughout its range.

Reliable record

The only authentic Colombian record of *B. poecilochrous* is a fourth-year pale morph, held in the Instituto de Ciencias Naturales, Bogotá, ICN 12502, from the region of Alto Chaitán (00°59'N, 77°35W), south of Túquerres, Nariño, at *c*.3,500 m (taken 20 December 1961 by Alejandro Jurado). It is uniform white below and grey

on the back, with the typical dorsal patch of an adult female. The specimen shows several characteristics of the species (Cabot & de Vries 2003, 2004): obvious dark barring at the base of the primaries, and on the secondaries, tertials and greater and median wing-coverts. It also has relatively blunt-tipped primaries, a relatively broad wing due to the proportionately longer secondaries, and wing-length 458 mm. The age can be determined by the narrow subterminal black tail-band, and the larger pale reddish brick patch from the nape through mantle, scapulars to the tertials where in these feathers is distally dark barred. The back patch reaches the foreneck-sides. forming a red mark visible from below on both sides of the foreneck. In definitive plumage the pale-morph adult female has a broader subterminal band, the back patch is uniformly red brick, and confined to the mantle, and the marks either side of the lower foreneck are grey. The specimen in question has the characteristic plumage of the northern (Ecuadorian) population: mid-grey back, back patch confined to the mantle, median and lesser wing-coverts obviously barred blackish, and a white trailing edge to the primaries and secondaries. Female B. polyosoma can be confused with *B. poecilochrous*, but is always separable by wing-length, with no overlapping values (Cabot & de Vries 2003). Females of *B. polyosoma* in several European and Ecuadorian collections (12 from Ecuadorian and one from the Colombian Andes) have noticeably shorter wing-length values (mean = 400.11, S.D.=7.55 mm).

This record offers confirmation that *Buteo poecilochrous* occupies the same elevations and habitats throughout its range, being a specialist of high ecosystems. Of all its congeners it has the lowest wing-loading and its broad wings may facilitate its hunting behaviour of hovering, in habitats up to 5,000 m where atmospheric pressure is almost half that at sea level and air temperatures drop to around -10° C (Mani 1980).

Acknowledgements

We are most grateful to Santiago Ayerbe, Director of the Museo de Historia Natural in Popayán, University of Cauca, whose collaboration was essential, Dr Jon Fjeldså who made many useful suggestions concerning the manuscript, and to Dr Sonia Sandoval, Executive Director of the Museo de Ciencias Naturales de Quito, Dr Marta Espinosa, Director of the Museo de Ciencias Naturales 'Mejía' in Quito, and Dr Cristina León, Director of the Museo del Instituto Técnico Superior 'Bolivar' in Ambato. Other curators who kindly allowed us to examine specimens are as follows: Dr Alice Cibois and Dr Manuel Ruedi, Museum d'Histoire Naturelle Ville de Genève, Geneva; H. Baagoe, Zoological Museum, University of Copenhagen; Dr Göran Frisk, Museum of Natural History, Stockholm; and Dr Claudio Pulcher, Museo Regionale di Scienze Naturali de Torino. We also thank staff of the Natural History Museum (Tring) for their kindness while visiting the collections. We are also indebted to Dr Lloyd Kiff and Travis Rosemberry, of the Peregrine Foundation, who provided some literature, Maria Angeles Prieto for her invaluable support and Martje Irene, Therese Isabel de Vries and Mike Lockwood who helped correct the English.

References:

Cabot, J. 1991. Distribution and habitat selection of *Buteo polyosoma* and *B. poecilochrous* in Bolivia and neighbouring countries. *Bull. Brit. Orn. Cl.* 114: 199–209.

- Cabot, J. & de Vries, T. 2003. Buteo polyosoma and Buteo poecilochrous are distinct species. Bull. Brit. Orn. Cl. 123: 190–207.
- Cabot, J. & de Vries, T. 2004. Age- and sex-differentiated plumages in the two colour morphs of the Variable Buzzard *Buteo polyosoma*: a case of delayed maturation with subadult males disguised in definitive adult female. *Bull. Brit. Orn. Cl.* 124: 272–285.
- Cabot, J. & de Vries, T. 2005. Relaciones taxonómicas y plumajes de los Busardos dorsirrojos Buteo polyosoma y B. poecilochrous. I Reunión Ecuatoriana de Ornitología, 3–5 de marzo de 2005, Quito.

Coello, M. 1997. Biología reproductiva y hábitos alimenticios de *Buteo poecilochrous* en el páramo de la Reserva Ecológica Antisana, Ecuador. Thesis. Pontificia Univ. Católica del Ecuador, Quito.

- de Vries, T. 1973. The Galapagos Hawk. An eco-geographical study with specific reference to its systematic position. Ph.D. thesis. Free Univ. of Amsterdam.
- Fjeldså, J. & Krabbe, N. 1990. The birds of the high Andes. Zool. Mus., Univ of Copenhagen & Apollo Books, Svendborg.
- Gurney, J. H. 1879. Note upon three American raptorial birds apparently new to science. Ibis 3: 171-178.

Hilty, S. L. & Brown, W. L. 1986. A guide to the birds of Colombia. Princeton Univ. Press.

- Johnson, A. W. 1965. The birds of Chile and adjacent regions of Argentina, Bolivia and Perú. Platt Establecimientos Gráficos, Buenos Aires.
- Koepcke, M. 1964. Aves del departamento de Lima. Gráfica Morsom, Lima.
- Lehmann, F. C. 1945. Rapaces colombianas: subfamilia Buteoninae. Rev. Univ. Cauca (6): 81-114.
- Mani, M. S. 1980. The physical environment of the highlands. Pp. 11–34 in Mani, M. S. & Giddins, L. E. (eds.) Ecology of highlands. Junk Publishers, The Hague.
- Meyer de Schauensee, R. 1964. The birds of Colombia. Livingston Press, Narbeth, PA.

Narosky, T. & Yzurieta, D. 1987. *Guia para la identificación de las aves de Argentina y Uruguay*. Ed. Vázquez Mazzini, Buenos Aires.

- Solís, C. & Black, J. 1985. Anidación de Buteo poecilochrous en Antisana. Rev. Geogr., Quito 21: 132-142.
- Remsen, J. V. & Traylor, M. A. 1989. An annotated list of the birds of Bolivia. Buteo Books, Vermillion, SD.
- Thiollay, J. M. 1994. Family Accipitridae (hawks and eagles). Pp. 52–206 in del Hoyo, J., Elliott, A. & Sargatal, J. (eds.) Handbook of the birds of the world, vol. 2. Lynx Edicions, Barcelona.
- Walker, B. 2002. Field guide to the birds of Machu Picchu, Peru. Second edn. PROFONANPE, Lima.
- Addresses: J. Cabot, Estación Biológica de Doñana. Av. Maria Luisa s/n. 41013, Seville, Spain, e-mail: cabot@ebd.csic.es. T. de Vries, Dpto. Biología, Pontificia Univ. Católica del Ecuador, Apartado 17-01-2184, Quito, Ecuador, e-mail: tdevries@puce.edu.ec. F. G. Stiles, Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá, Colombia, e-mail: fgstilesh@unal.edu.co

© British Ornithologists' Club 2006